

Information Theory Society Student Committee Report by Sergio D. Servetto

*IT Society BOG Meeting
June 24th, 2007
ISIT -- Nice, France.*

Committee Chair: Sergio Servetto (current), Andrea Goldsmith (1st past)
Student Co-Chairs: Ivana Maric and Brooke Shrader
Volunteer Coordinator: Lalitha Sankar
Website Coordinator / Webmaster: Amin Mobasher

The main student committee activity since the last BOG meeting at CISS'07 was organizing the student-led research discussions that will take place this Monday, and the panel that will take place this Thursday, during the conference. Work also continued on a new initiative to generate summaries of landmark papers to be published on the student website and possibly the IT newsletter, and on the organization of a winter/summer school in information theory.

New Committee Chair: Sergio Servetto took over the chairmanship of this committee at the last CISS. In the following weeks, he has spent some time familiarizing himself with the responsibilities of the new job, providing help to the students who do the real work in this committee, and repeatedly pestering the poor first past chair with questions on how to do things (including this report!), for which she always had a helpful and friendly reply, hereby acknowledged with thanks.

Events for the 2007-2008 year: We are planning to hold the following events:
ISIT (summer 2007): 2 events; a research round table lunch and discussion, and a student committee lunch meeting and panel discussion.
Allerton (fall 2007): 1 event, a panel discussion (lunch or evening)
CISS (spring 2008): 1 event; a research round table lunch and discussion

Recent Events:

CISS'07 Research Round Table: A research round table discussion was held during lunch on Wednesday March 14 at CISS. There were 6 discussion leaders:

Joint source-channel coding for wireless networks (Deniz Gunduz, Poly)

Convex optimization applications (Joydeep Acharya, Rutgers)

Detection and estimation (Anima Anandkumar, Cornell)

Distributed source coding (Peiyu Tan, Lehigh)

Security and cryptography (Alvaro Cardenas, Berkeley)

MIMO systems (Mike Tinston, George Mason)

The research discussion was attended by a good number of students, I'd like to say most of those registered for the conference, though this is only based on second-hand reports from others and not from any direct observation I made. The support from the conference organizers was very adequate. Details and pictures can be found in our website.

ISIT'07 Panel Discussion: A panel discussion will be held at ISIT on Thursday, June 28th, 2007 during lunch. The panel will deal with funding issues in our field, and how these affect the problems that students and postdocs get to work on, as well as the opportunities for employment later available to them. The panelists that have kindly agreed to serve are:

Jeff Andrews and Joao Barros (young academics, in US and Europe)

Ralf Koetter and H. Vincent Poor (senior academics, in US and Europe)

A. Robert Calderbank (senior academic with extensive industrial experience)

Details on this panel will be supplied in the following report.

ISIT'07 Research Round Table: A research discussion led by students will be held at lunch on Monday, June 25th, 2007. Topics for the discussions are: Multiantenna and Multiuser Channels Recent Results on the Capacity Regions and Degrees of Freedom; Rate Distortion Theory for Multi-terminal Networks; Cognitive Radios and Universal IT; Neuroscience and IT; Multiaccess Channels with Feedback; IT Security; Transmission of Correlated Data in Wireless Networks; Joint Source-Channel Coding; Information Theoretical Aspects of Decentralized Detection - with Applications. Details on this event will be provided in the next report.

Student Website: In recent weeks, we have moved our website. This site was previously hosted at Cornell, in the file server of Sergio Servetto's research group; now it is hosted at Notre Dame, in the same server that hosts the main website of the society. Further integration and provision of functionalities is expected, as the society considers options for availability of web materials. We expect the students to be major consumers and drivers in this evolution towards web-based services.

Student summaries of landmark papers: In her last report in March 2007, Andrea mentioned work in progress on a new initiative for students to generate summaries of well-known landmark papers in IT, indicating that more details on this were to come for this report. The way in which we plan to go about this is by producing one sample article of what we expect to see in articles of this type, and such work is under way: Ron Dabora, a former student in Sergio's group, and starting on June 10th postdoc in Andrea's group, is developing one such article based on material he wrote for his doctoral dissertation, successfully defended last April. Due to graduation, move from Ithaca to Palo Alto, and other related and understandable matters, this work has progressed more slowly than we expected. But we expect that this sample article should be ready by the next BoG meeting, for revision and discussion at that point.

Summer/Winter School on Information Theory: This is the central topic of Sergio's presentation at the BoG meeting. Please see slides.